

WHAT IS CLAIMED IS:

1 1. A method performed at a wireless device, the method comprising:
2 detecting a signal representing an environmental state in the vicinity of the wireless
3 device;
4 comparing the environmental state represented by the signal against a set of remotely
5 programmable rules at the wireless device; and
6 if the environmental state satisfies at least one of the rules, generating, based on the
7 satisfied rule, a communication for transmission to a wireless network.

1 2. The method of claim 1, further comprising:
2 detecting the environmental state; and
3 generating the signal representing the environmental state.

1 3. The method of claim 1, wherein the signal represents sound level.

1 4. The method of claim 1, further comprising identifying the environmental state
2 represented by the signal.

1 5. The method of claim 4, wherein identifying the environmental state
2 represented by the signal comprises:
3 determining an environmental condition associated with the state; and
4 determining a level of the environmental condition.

1 6. The method of claim 1, wherein at least one of the rules comprises multiple
2 conditions that must be satisfied.

1 7. The method of claim 1, wherein the communication comprises a Short
2 Message Service message.

1 8. The method of claim 1, wherein the communication is destined for a second
2 wireless device.

1 9. The method of claim 1, wherein at least one of the rules specifies a level that
2 an environmental state must exceed for the rule to be satisfied.

1 10. The method of claim 1, further comprising:
2 detecting a request to modify the programmable rules;
3 determining whether parameters for a rule have been received; and
4 if the parameters have been received, modifying the rules.

1 11. The method of claim 10, wherein the request is from a second wireless device.

1 12. The method of claim 10, wherein modifying the rules comprises adding a new
2 rule based on the received parameters.

1 13. The method of claim 1, further comprising:
2 detecting a request to open a voice channel in response to the communication; and

3 establishing the voice channel using the wireless device.

1 14. The method of claim 1, wherein at least one of the rules specifies multiple
2 communications for an environmental state.

1 15. The method of claim 1, wherein the wireless device comprises a cellular
2 telephone.

1 16. A wireless device comprising:
 2 a sensor operable to detect an environmental state in the vicinity of the wireless
 3 device and to generate a signal representing the environmental state;
 4 a processor coupled to the sensor, the processor operable to:
 5 detect the signal representing the environmental state,
 6 compare the environmental state represented by the signal against a set of
 7 remotely programmable rules, and
 8 if the environmental condition satisfies at least one of the rules, generate,
 9 based on the satisfied rule, a communication for transmission to a wireless network; and
 10 a transceiver coupled to the processor, the transceiver operable to wirelessly send the
 11 communication.

1 17. The wireless device of claim 16, further comprising:
 2 an audio input device coupled to the processor, the audio input device operable to
 3 detect a user's voice and to generate a signal representative thereof;
 4 an audio output device coupled to the processor, the audio output device operable to
 5 receive a signal representative of sound and to generate sound representative thereof;
 6 a visual output device coupled to the processor, the visual output device operable to
 7 receive a signal representative of visual information and to generate visual information
 8 representative thereof; and
 9 a user-manipulable input device coupled to the processor, the user-manipulable input
 10 device operable to detect user manipulation thereof and to generate a signal representative
 11 thereof.

1 18. The wireless device of claim 16, wherein the processor is further operable to
2 identify the environmental state represented by the signal.

1 19. The wireless device of claim 18, wherein the processor is operable to
2 determine an environmental condition associated with the environmental state and to
3 determine a level of the environmental condition to identify the environmental state
4 represented by the signal.

1 20. The wireless device of claim 16, wherein the processor is further operable to:
2 detect a request to modify the programmable rules;
3 determine whether parameters for a rule have been received; and
4 if the parameters have been received, modify the rules.

1 21. The wireless device of claim 16, wherein at least one of the rules specifies a
2 level that an environmental state must exceed for the rule to be satisfied.

1 22. The wireless device of claim 16, wherein the processor is further operable to:
2 detect a request to open a voice channel in response to the communication; and
3 establish the voice channel using the wireless device.

1 23. The wireless device of claim 16, wherein at least one of the rules comprises
2 multiple conditions that must be satisfied.

1 24. The wireless device of claim 16, wherein the communication is destined for a
2 second wireless device.

1 25. The wireless device of claim 16, wherein the wireless device comprises a cellular
2 telephone.

1 26. An article comprising a machine-readable medium storing instructions operable to
2 cause one or more machines to perform operations comprising:

3 determining whether a signal representing an environmental state in the vicinity of a
4 wireless device has been detected at the wireless device;

5 comparing the environmental state represented by the signal against a set of remotely
6 programmable rules at the wireless device; and

7 if the environmental state satisfies at least one of the rules, generating, based on the
8 satisfied rule, a communication for transmission to a wireless network.

1 27. The article of claim 26, wherein the instructions are further operable to cause one
2 or more machines to perform operations comprising identifying the environmental state
3 represented by the signal.

1 28. The article of claim 27, wherein identifying the environmental state represented
2 by the signal comprises:

3 determining an environmental condition associated with the state; and

4 determining a level of the environmental condition.

1 29. The article of claim 26, wherein at least one of the rules comprises multiple
2 conditions that must be satisfied.

1 30. The article of claim 26, wherein the communication is destined for a second
2 wireless device.

1 31. The article of claim 26, wherein at least one of the rules specifies a level that an
2 environmental state must exceed for the rule to be satisfied.

1 32. The article of claim 26, wherein the instructions are further operable to cause one
2 or more machines to perform operations comprising:

3 detecting a request to modify the rules;

4 determining whether parameters for a rule have been received; and

5 if the parameters have been received, modifying the rules.

1 33. The article of claim 26, wherein the instructions are further operable to cause one
2 or more machines to perform operations comprising:

3 detecting a request to open a voice channel in response to the communication; and

4 establishing the voice channel using the wireless device.

1 34. A framework for wireless sensor alerts, the framework comprising:
2 a rule set comprising programmable rules that specify conditions under which
3 communications are to be sent based on an environmental state in the vicinity of a wireless
4 device and the communications to be sent;
5 a rule editor operable to modify the rules in the rule set based on received rule
6 parameters;
7 a rule engine operable to:
8 receive a proposition for a rule, the proposition representing an environmental
9 state in the vicinity of a wireless device,
10 compare the proposition against the rules, and
11 if the proposition satisfies a condition of at least one of the rules, determine, based
12 on the satisfied rule, a communication for transmission to a wireless network.

1 35. The framework of claim 34, wherein the environmental state comprises an
2 environmental condition and a level of the environmental condition.

1 36. The framework of claim 34, wherein at least one of the rules has multiple
2 conditions that must be satisfied.

1 37. The framework of claim 34, wherein the communication is destined for a second
2 wireless device.

1 38. The framework of claim 34, wherein at least one of the rules specifies a level that
2 an environmental state must exceed for the rule to be satisfied.

1 39. The framework of claim 34, wherein the rule editor is operable to:
2 detect a request to modify the programmable rules;
3 determine whether parameters for a rule have been received; and
4 if the parameters have been received, modify the rules.

1 40. A system for wireless sensor alerts, the system comprising:
2 a wireless network operable to receive communications from and send communications
3 to wireless telephones;
4 a first wireless telephone operable to wirelessly send communications to and receive
5 communications from the wireless network, the wireless telephone comprising:
6 a sensor operable to detect an environmental state in the vicinity of the wireless
7 telephone and to generate a signal representative thereof,
8 a microprocessor coupled to the sensor, the microprocessor operable to:
9 detect the signal;
10 generate a rule proposition based on the signal, the proposition specifying
11 an environmental condition and level associated with the state;
12 compare the rule proposition to rules in a remotely programmable rule
13 database to determine whether the proposition satisfies a condition of a rule;
14 if the proposition satisfies a condition of a rule, determine, based on the
15 satisfied rule, a message for communication to a second wireless telephone;
16 determine whether a communication regarding opening a voice channel in
17 response to the message has been received from the second wireless telephone;
18 if the communication has been received, open a voice channel to the
19 second wireless telephone;
20 detect a request to modify the programmable rules;
21 determine whether parameters for a rule have been received; and
22 if the parameters have been received, modify the rules, and

23 a transceiver coupled to the processor, the transceiver operable to send the
24 message to the wireless network; and

25 the second wireless telephone, the second wireless telephone operable to wirelessly send
26 communications to and receive communications from the wireless network, the wireless
27 telephone operable to:

28 receive the message from the first wireless telephone,
29 visually present the message,
30 determine whether a user desires to open a voice channel to the first wireless
31 telephone in response to the message,

32 if a user desires to open a voice channel in response to the message, send the
33 communication regarding opening a voice channel to the wireless network for communication to
34 the first wireless telephone,

35 visually present a user interface for modifying the rules,
36 detect user commands indicating parameters for a rule, and
37 send a communication containing the parameters to the wireless network for
38 conveyance to the first wireless telephone.